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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,417	09/20/2005	Craig Matthew Brown	00169.002764.	5089
5514 7590 06/19/2009 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				
EXAMINER				
WELCH, DAVID T				
ART UNIT		PAPER NUMBER		
2628				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/525,417

**Applicant(s)**

BROWN, CRAIG MATTHEW

**Examiner**

DAVID T. WELCH

**Art Unit**

2628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17, 21, 22, 24, 25, 30, 31 and 39-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 21, 22, 24, 25, 30, 31 and 39-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/21/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 7, 2009 has been entered.

### ***Response to Amendment***

2. Applicant's amendments filed on April 7, 2009 have been entered. Claims 1-3, 7, 10-12, 15-17, 21, 22, 24, 25, 30, 31, 39, and 41 have been amended. No claims have been canceled. No claims have been added. Claims 1-17, 21, 22, 24, 25, 30, 31, and 39-42 are still pending in this application, with claims 1, 15, 21, 22, 24, 25, 30, and 31 being independent.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-17, 21, 22, 24, 25, 30, 31, and 39-42 are rejected under 35

U.S.C. 102(b) as being anticipated by *Adobe PDF 1.4 Specification*, December 2001, referred herein as Adobe.

Regarding claim 1, Adobe teaches a computer-implemented method of representing an amount of image color in a composite image (page 410, paragraph 4, beginning with "A given object..." through paragraph 6), said method comprising the steps of: generating at least one additional opacity channel for use in creating the composite image (page 421, paragraph 1; page 422, paragraph 2, beginning with "All of these...", and associated functions; page 423, the first two paragraphs, and associated functions; page 426, paragraph 3, beginning with "These conventions..." and subsequent functions; additional opacity channel  $q_r/q_i$ ); compositing at least one graphical object having object color and object capacity, with an image having image opacity and the image color, to create the composite image, the composite image having composite image color and composite image opacity, the composite image color and composite image opacity being derived from one or more of the object color, the object opacity, the image color and the image opacity (color compositing: page 419, section 7.2.5, the color compositing formula and succeeding paragraph; opacity compositing: page 423, the first two paragraphs, and associated functions and table); compositing the object opacity with the additional opacity channel to update the additional opacity channel, the updated additional opacity channel representing an amount of the image color remaining in the composite image following compositing of the at least one graphical object with the image (page 419, section 7.2.5, the color compositing formula and succeeding paragraph; page 422, paragraph 2, beginning with

"All of these...", and associated functions; page 423, the first two paragraphs, and associated functions; page 425, paragraph 1, lines 1-3; paragraph 2, beginning with "The objects contained"; page 426, paragraph 3, beginning with "These conventions..." and subsequent functions; page 440, paragraph beginning with "The second method";  $q_i/q_i$  represents the amount of image color remaining following the composition of the object and image); and storing at least the updated additional opacity channel in a computer-readable memory (page 705, paragraph 5, beginning with "Memory limits"), wherein the steps are performed on a processor (page 705, paragraph 1, lines 2-4).

Regarding claim 2, Adobe teaches a method according to claim 1, and further teaches the method, further comprising the step of utilizing the updated additional opacity channel to remove the image color and image opacity remaining in the composite image following composition with the object color and object opacity (page 411, paragraph 3, beginning with "An object's opacity...", lines 1-4; paragraph 5, beginning with "One or more..."; page 417, the blend modes, e.g. Overlay, Darken, Lighten; furthermore, the purpose of compositing alpha [opacity] values with color is to determine to what degree, and in what manner, the images being composited add to, or remove from, one another's color and opacity).

Regarding claim 3, Adobe teaches a method according to claim 2, and further teaches the method, further comprising the step of utilizing the updated additional opacity channel to composite the object color and object opacity with the image color and image opacity (color compositing: page 419, section 7.2.5, the color compositing formula and succeeding paragraph; opacity compositing: page 423, the first two paragraphs, and associated functions).

Regarding claim 4, Adobe teaches a method according to any one of claims 1 to 3, and further teaches the method, wherein the at least one object is one object of a grouped plurality of objects (page 425, paragraph 1, lines 1-3; page 411, paragraph 5, beginning with "One or more...").

Regarding claim 5, Adobe teaches a method according to claim 4, and further teaches the method, further comprising the step of applying a group effect to the grouped plurality of objects (page 425, paragraph 2, beginning with "The objects contained"; page 440, paragraph beginning with "G can be").

Regarding claim 6, Adobe teaches a method according to claim 4, and further teaches the method, further comprising the step of compositing object color and object opacity of each object of the grouped plurality of objects with the image color and image opacity (page 425, paragraph 2, beginning with "The objects contained"; page 411, paragraph 5, beginning with "One or more..."; page 426, the group compositing formula  $C_i$  at the bottom).

Regarding claim 7, Adobe teaches a method according to claim 1, and further teaches the method, further comprising the step of inverting the opacity values of the updated additional opacity channel (page 423, the  $q_r$  function; substituting the union function into the opacity compositing  $q_r$  function, the opacity is inverted, i.e. 1-opacity; also, see page 423, paragraph 2, beginning with "where b and s...").

Regarding claim 8, Adobe teaches a method according to claim 1, and further teaches the method, further comprising the step of copying the image to form an image copy (page 77, the description of bit position 12, lines 1-2).

Regarding claim 9, Adobe teaches a method according to claim 8, and further teaches the method, further comprising the step of compositing the object color and object opacity with color and opacity component values of the image copy (color compositing: page 419, section 7.2.5, the color compositing formula and succeeding paragraph; opacity compositing: page 423, the first two paragraphs, and associated functions).

Regarding claim 10, Adobe teaches a method according to claim 9, and further teaches the method, wherein the updated additional opacity channel represents opacity component values associated with the image copy remaining in the image copy following composition of the object color and object opacity with the color and opacity component values of the image copy (page 410, paragraph 4, beginning with "A given object...", lines 1-3; the compositing is cumulative, therefore the altered opacity channel represents the opacity following the composition, and is then used for the next composition).

Regarding claim 11, Adobe teaches a method according to claim 9, and further teaches the method, further comprising the step of utilizing the updated additional opacity channel to remove the color and opacity component values of the image copy remaining in the image copy following composition of the object color and object opacity with the color and opacity component values of the image copy (page 411, paragraph 3, beginning with "An object's opacity...", lines 1-4; paragraph 5, beginning with "One or more..."; page 417, the blend modes, e.g. Overlay, Darken, Lighten; furthermore, the purpose of compositing alpha [opacity] values with color is to determine to what degree, and in what manner, the images being composited add to, or remove from, one another's color and opacity).

Regarding claim 12, Adobe teaches a method according to claim 11, and further teaches the method, further comprising the step of utilizing the updated additional opacity channel to composite the object color and object opacity with the image color and image opacity (color compositing: page 419, section 7.2.5, the color compositing formula and succeeding paragraph; opacity compositing: page 423, the first two paragraphs, and associated functions; page 410, paragraph 4, beginning with "A given object...", lines 1-3; the compositing is cumulative, thus the altered opacity channel is used for the next composition).

Regarding claim 13, Adobe teaches a method according to claim 1, and further teaches the method, wherein the object color and object opacity are accessed from an image file (page 1, section 1.1, paragraph 1, beginning with "This book provides...", lines 3-5).

Regarding claim 14, Adobe teaches a method according to claim 1, and further teaches the method, wherein the image color and image opacity are accessed from an image file (page 1, section 1.1, paragraph 1, beginning with "This book provides...", lines 3-5).

Regarding claim 15, Adobe teaches a computer-implemented method of representing an amount of image color in a composite image (page 410, paragraph 4, beginning with "A given object..." through paragraph 6), said method comprising the steps of: generating at least one additional opacity channel for use in creating the composite image (page 421, paragraph 1; page 422, paragraph 2, beginning with "All of these...", and associated functions; page 423, the first two paragraphs, and associated



functions; page 426, paragraph 3, beginning with "These conventions..." and subsequent functions; additional opacity channel  $q_r/q_i$ ); compositing at least one graphical object having object color and object capacity, with an image having image opacity and the image color, to create the composite image, the composite image having composite image color and composite image opacity, the composite image color and composite image opacity being derived from one or more of the object color, the object opacity, the image color and the image opacity (color compositing: page 419, section 7.2.5, the color compositing formula and succeeding paragraph; opacity compositing: page 423, the first two paragraphs, and associated functions and table); compositing the object opacity with the additional opacity channel to update the additional opacity channel, the updated additional opacity channel representing an amount of the image color remaining in the composite image following compositing of the at least one graphical object with the image (page 419, section 7.2.5, the color compositing formula and succeeding paragraph; page 422, paragraph 2, beginning with "All of these...", and associated functions; page 423, the first two paragraphs, and associated functions; page 425, paragraph 1, lines 1-3; paragraph 2, beginning with "The objects contained"; page 426, paragraph 3, beginning with "These conventions..." and subsequent functions; page 440, paragraph beginning with "The second method";  $q_r/q_i$  represents the amount of image color remaining following the composition of the object and image); storing at least the updated additional opacity channel in a computer-readable memory (page 705, paragraph 5, beginning with "Memory limits"); and utilizing the stored updated additional opacity channel to remove the remaining

image color in the composite image (page 411, paragraph 3, beginning with "An object's opacity..." lines 1-4; paragraph 5, beginning with "One or more..."; page 417, the blend modes, e.g. Overlay, Darken, Lighten; furthermore, the purpose of compositing alpha [opacity] values with color is to determine to what degree, and in what manner, the images being composited add to, or remove from, one another's color and opacity), wherein the steps are performed on a processor (page 705, paragraph 1, lines 2-4).

Regarding claims 16 and 17, the limitations of these claims correspond to the limitations of claims 3 and 4, respectively. Thus, they are rejected on the same grounds as claims 3 and 4, respectively.

Regarding claims 21 and 22, the limitations of these claims correspond to the limitations of claims 1 and 15, respectively. Thus, they are rejected on the same grounds as claims 1 and 15, respectively.

Regarding claims 24 and 25, Adobe teaches an apparatus for representing an amount of image color in a composite image (page 410, paragraph 4, beginning with "A given object..." through paragraph 6), said apparatus comprising: a memory for storing data and a computer program (page 705, paragraph 5, beginning with "Memory limits"); and a processor coupled to said memory for executing said computer program (page 705, paragraph 1, lines 2-4). The remaining limitations of these claims correspond to the limitations of claims 1 and 15, respectively. Thus, they are rejected on the same grounds as claims 1 and 15, respectively.

Regarding claims 30 and 31, the limitations of these claims correspond to the limitations of claims 1 and 15, respectively. Thus, they are rejected on the same grounds as claims 1 and 15, respectively.

Regarding claims 39 and 41, Adobe teaches the methods according to claims 1 and 15, respectively, and further teaches the methods, wherein the additional opacity channel is initially set to fully opaque (page 133, paragraph beginning with "PDF's graphics", lines 1-3; page 440, paragraph beginning with "The second method", lines 1-2; page 459, paragraph beginning with "As stated", lines 3-6 and paragraph beginning "In this blend mode", lines 3-4).

Regarding claims 40 and 42, Adobe teaches the methods according to claims 1 and 15, respectively, and further teaches the methods, further comprising the step of compositing the composite image with the image using a group opacity (page 425, paragraph 2, beginning with "The objects contained" and the last bullet point; page 426, the group compositing formula  $C_i$  at the bottom).

### ***Response to Arguments***

5. Applicant's arguments, see page 12, filed April 7, 2009, with respect to the 101 rejections have been fully considered and are persuasive. The amendments to the independent claims are sufficient to overcome the 101 rejection, as the amended claims are directed to statutory subject matter; thus the 101 rejections of these claims have been withdrawn.

6. Applicant's arguments, see pages 12-14 of the Applicant's Remarks with respect to the 102 rejection of the claims, have been fully considered but are moot in view of the Examiner's new interpretation of the claimed "additional opacity channel" resulting from the amendments to the claims. The Examiner respectfully submits that the above Office Action illustrates Adobe's disclosure of the subject matter, as claimed.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID T. WELCH whose telephone number is (571)270-5364. The examiner can normally be reached on Monday-Thursday, and alternate Fridays, 7:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571)272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/dtw/

/XIAO M. WU/  
Supervisory Patent Examiner, Art Unit 2628